

WRITTEN DECISION  
OF THE INTERNATIONAL  
EXAMINATION AUTHORITY (SUPPLEMENTARY SHEET)

International file reference

10/590901  
EPC/EP2005/050218

In this decision reference is made to the following documents  
(D) quoted in the report of the international examination  
authority; the numbering is also adhered to in the further  
procedure:

D1 US 2002 063 332

D2 US 6 426 242

D3 US 3 945 030

D4 WO 03 030 247

**Box No. V**

[1] This application does not meet the requirements of  
Article 33(2) PCT, because the object of claims 1-3, 5-9,  
13-18 is not novel.

[1.1] The object of claim 1 is not novel because D1 Fig. 1-5  
shows

A system comprising

- at least one electrical component (9), that is  
provided with at least one electrical contact surface  
(7),
- at least one electrical connecting lead (4) for  
electrically contacting the contact surface (7) of  
the component (9) and
- at least one electrical insulating layer (8, 5),  
which is disposed on the component (9) and  
encompasses at least one opening. Said opening being  
continuous in the direction of the thickness of the  
insulating layer and being arranged so as to lie  
opposite the contact surface (7) of the component  
(9), whereby
- the insulating layer (8, 5) is provided with a

- lateral surface that delimits the opening and
- the electrical connecting lead (4) is provided with at least one metallization layer located on the lateral surface (lateral surface of 5), characterized in that
  - the metallization layer (4) is oriented at an angle to contact surface (7).

Document D2 (Fig 5A, 6A; contact surface 7, 8, component 3, 4, connecting lead 17, 18, insulating layer 10, 20, 21, opening 15, 16) also discloses the object of claim 1.

Document D3 (Fig. 12-15; contact surface 44p, component 32, connecting lead 96, insulating layer 33, 72, opening 101, 102) also discloses the object of claim 1.

[1.2] The object of claim 2 is not novel because D1 and D2 also show angles of 30-80 or 50-70 degrees.

[1.3] The object of claim 3 is not novel because D1 (par. 108) and D2 also show metallization layer thicknesses ranging from 0.5-30 micrometers.

[1.4] The object of claim 5 is not novel because D3 Fig. 13 also shows a step (101, 102).

[1.5] The object of claim 6 is not novel because D1 shows such layer thicknesses for the insulating layer 5 and D2 for insulating layer 10.

[1.6] The object of claim 7 is not novel because in D1, the insulating layer 8, 5 consists of two layers 8 and 5, and in D2 of 10 and 21.

[1.7] The object of claims 8 and 9 is not novel because D1 shows a laminated insulating layer (8, 5), of which at least one part of the insulating foil has been laminated

onto the component in such a way that a surface contour (7) of the component is mapped in a surface contour of the insulating foil that has been turned away from the component.

[1.8] The object of claims 13-15 is not novel because D2 also discloses semiconductor components, power semiconductor components (col. 3 l. 29-35) and transistors (Fig. 5).

[1.9] The object of claim 16 is not novel because in D1 (Fig. 2) the openings are arranged as matrix.

[1.10] The object of claims 17 and 18 as claimed in the procedure is not novel because these steps are disclosed in D1 (Fig. 1-5) and D2 (Fig 5A, 6A; contact surface 7, 8, component 3, 4, connecting lead 17, 18, insulating layer 10, 20, 21, opening 15, 16).

[2] This application does not meet the requirements of Article 33(3) PCT, because the object of claims 4, 10-12, 19-26 is not based on an inventive step.

Documents D1 and D2 describe methods for contacting semiconductor components.

The person skilled in the art is always searching for the potential to improve the contacting and the conductor paths.

Document D4 discloses improvements in the conductor paths and the contacting, above all a possibility for the production of contacts with a larger area and with a higher current density (abstract). Therefore, the person skilled in the art would combine D1 or D2 with D4 in order to achieve a higher performance of the chips.

The details of the conductor paths and the multi-layered structures in claims 4, 10-12 and 19-26 are known from

D4. Therefore, the object of claims 4, 11, 12, 19-26 is not based on an inventive step.

- [3] None of the claims available at present is novel and inventive compared with the documents that were found during research conducted into the prior art.